AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-2.   (Cancelled)

3.   (Currently Amended)   A method of performing a SPICE calculation and device simulation for a partially depleted SOI MOSFET formed on an SOI substrate comprising:

increasing an input signal cycle and one of an output load capacitance and an output load resistance by a ratio ~~"X"~~ X, wherein the ratio X is a ratio of an increased value of one of the input signal cycle, the output load capacitance, and the output load resistance to an initial value of one of the input signal cycle, the output load capacitance, and the output load resistance;

finding an initial value ~~"Y"~~ Y of a total body charge at which there is zero fluctuation in the total body charge after one input signal cycle; and

extrapolating a value of Y for when X=1 by expressing Y as a function of X to find a steady state during circuit operation of a partially depleted SOI MOSFET[[;]]

~~whereby a steady state during circuit operation of a partially depleted SOI MOSFET is found~~.

4.   (Currently Amended) A method of performing a SPICE calculation and device simulation for a partially depleted SOI MOSFET formed on an SOI substrate comprising:

increasing a cycle of trial pulses that imitate actual circuit operation by "X" times to extend the trial pulses with similarity waveforms;

finding an initial value "Y" of a total body charge at which there is zero fluctuation in the total body charge after one trial pulse cycle; and

extrapolating a value of Y for when X=1 by expressing Y as a function of X;

extrapolating a value of Y for when X=1 by expressing Y as a function of X to find a steady state during circuit operation of a partially depleted SOI MOSFET[[;]]

~~whereby a steady state during circuit operation of a partially depleted SOI MOSFET is found~~.

5-6.   (Cancelled)